

10/06/00



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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR § 1.53(b))	Attorney Docket No. 4681-004	
	First Inventor or Application Identifier Tom O'Hanlon and David Hagen	
	Title	SMALL FOOTPRINT NETWORK KIOSK
	Express Mail Label No. EL634166345US	


PTO
10/06/00




APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i>		ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231	
1. <input checked="" type="checkbox"/> *Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)	6. <input type="checkbox"/> Microfiche Computer Program (Appendix)	ACCOMPANYING APPLICATION PARTS 8. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s)) 9. <input checked="" type="checkbox"/> 37 C.F.R. § 3.73(b) Statement <input checked="" type="checkbox"/> Power of Attorney (when there is an assignee) 10. <input type="checkbox"/> English Translation Document (if applicable) 11. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Statement (IDS)/PTO-1449 Citations 12. <input type="checkbox"/> Preliminary Amendment 13. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 14. <input checked="" type="checkbox"/> *Small Entity <input type="checkbox"/> Statement filed in prior application, Statement(s) Status still proper and desired 15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. <input checked="" type="checkbox"/> Other: Express Mail Certification	
2. <input checked="" type="checkbox"/> Specification [Total Pages 31] (preferred arrangement set forth below) — Descriptive title to the Invention — Cross References to Related Applications — Statement Regarding Fed sponsored R & D — Reference to Microfiche Appendix — Background of the Invention — Brief Summary of the Invention — Brief Description of the Drawings (if filed) — Detailed Description — Claim(s) — Abstract of the Disclosure	7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Copy b. <input type="checkbox"/> Paper Copy (identical to computer copy) c. <input type="checkbox"/> Statement verifying identity of above copies		
<input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets 3 sets of 7]			
<input checked="" type="checkbox"/> Oath or Declaration [Total Pages 1]			
a. <input checked="" type="checkbox"/> Newly executed (original or copy)			
b. <input type="checkbox"/> Copy from a prior application (37 C.F.R. § 1.63(d)) (for continuation/divisional with Box 17 completed) [Note Box 5 below]			
i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).			
<input type="checkbox"/> Incorporation By Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.			
*NOTE FOR ITEMS 1 & 14: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).			

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary statement:

<input type="checkbox"/> Continuation	<input type="checkbox"/> Divisional	<input type="checkbox"/> Continuation-in-part (CIP)	of prior application No: _____
Prior application information: Examiner: _____			Group/Art Unit: _____

18. CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number or Bar Code Label  or <input type="checkbox"/> Correspondence address below (Insert Customer No. or Attach bar code label here)					
NAME		COATS & BENNETT, P.L.L.C. PATENT TRADEMARK OFFICE			
ADDRESS		P.O. Box 5			
CITY	Raleigh	STATE	NC	ZIP CODE	27602
COUNTRY	USA	TELEPHONE	919-854-1844	FAX	919-854-2084

Name (Print/Type)	Larry L. Coats	Registration No. (Attorney/Agent)	25,620
Signature		Date	10/6/2000

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FEE TRANSMITTAL

Patent fees are subject to annual revision on October 1

These are the fees effective October 1, 2000.

Small Entity payments must be supported by a small entity statement.
otherwise large entity fees must be paid. See Forms PTO/SB/09-12.

See 37 C.F.R. §§ 1.27 and 1.28.

TOTAL AMOUNT OF PAYMENT \$515.00

Complete if Known

Application Number	TBA
Filing Date	
First Named Inventor	Tom O'Hanlon and David Hagen
Examiner Name	TBA
Group Art Unit	TBA
Attorney Docket No.	4681-004

METHOD OF PAYMENT (check one)

1. ☒ The Commission is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number 18-1167

Deposit Account Name Coats & Bennett, P.L.L.C.

- ☒ Charge Any Additional Fee Required Under 37 CFR §§1.16 and 1.17 ☐ Charge the Issue Fee Set in 37 CFR §1.18 at the Mailing of the Notice of Allowance

2. ☒ Payment Enclosed: ☒ Check ☐ Money Order ☐ Other

FEE CALCULATION**1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	690	201	355	Utility filing fee	355.00
106	310	206	155	Design filing fee	
107	480	207	240	Plant filing fee	
108	760	208	380	Reissue filing fee	
114	150	214	75	Provisional filing fee	
SUBTOTAL (1)					\$355.00

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
20	-20 = 0	X 9.0 =	\$ 0.00
Independent Claims	6	-3 = 3	X 40.0 = \$120.00
Multiple Dependent Claims		X	

** or number previously paid, if greater; For Reissues, see below

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	78	202	39	Independent claims in excess of 3
104	260	204	130	Multiple dependent claim
109	78	209	39	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)				\$120.00

FEE CALCULATION (continued)

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examination action	
115	110	215	55	Extension for reply within first month	
116	380	216	190	Extension for reply within second month	
117	870	217	435	Extension for reply within third month	
118	1,360	218	680	Extension for reply within fourth month	
128	1,850	228	925	Extension for reply within fifth month	
119	300	219	150	Notice of Appeal	
120	300	220	150	Filing a brief in support of an appeal	
121	260	221	130	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,210	241	605	Petition to revive - unintentional	
142	1,210	242	605	Utility issue fee (or reissue)	
143	430	243	215	Design issue fee	
144	580	244	290	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Petitions related to provisional applications	
126	240	126	240	Submission of Information Disclosure Stmt.	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40.00
146	760	246	380	Filing a submission after final rejection (37 CFR 1.129(a))	
149	760	249	380	For each additional invention to be examined (37 CFR 1.129(b))	
Other fee (specify)					
Other fee (specify)					
*Reduced by Basic Filing Fee Paid					
SUBTOTAL (3)					\$40.00

SUBMITTED BYTyped or Printed Name **Larry L. Coats**Signature 

Date 10/6/2000

Complete (if applicable)Reg. Number **25,620**

Deposit Account User ID 18-1167

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Tom O'Hanlon
and David Hagen

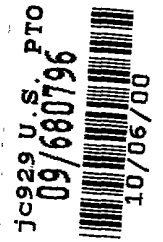
Serial No. _____

Filed: _____

For: **SMALL FOOTPRINT NETWORK KIOSK**

Attorney's Docket No. P-4681.004

Express Mail Certification
Label No. EL634166345US



Raleigh, North Carolina

October 6, 2000

Honorable Commissioner of Patents and Trademarks
BOX PATENT APPLICATION
Washington, D.C. 20231

Sir:

EXPRESS MAIL CERTIFICATE LABEL NO. EL634166345US

DATE MAILED: October 6, 2000

I hereby certify that the enclosed specification and claims, drawings (3 sets of 7 sheets), Declaration and Power Of Attorney, Small Entity Declaration, Fee Transmittal Form, Utility Patent Application Transmittal form, Assignment, Assignment Recordation Form and our Check #2762 in the amount of \$515.00, are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to Honorable Commissioner of Patents and Trademarks, BOX PATENT APPLICATION, Washington, D.C. 20231.

Respectfully submitted,

COATS & BENNETT, P.L.L.C.

By:

Larry L. Coats
Registration No. 25,620

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EXPRESS MAIL LABEL NO.:EL634166345US
DATE MAILED:October 6, 2000

UNITED STATES PATENT APPLICATION FOR GRANT OF LETTERS PATENT

**David Hagen
and
Tom O'Hanlon**

INVENTORS

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SMALL FOOTPRINT NETWORK KIOSK

RELATED APPLICATION

The present application is a continuation-in-part of application serial number 09/614,399 filed 12 July 2000, the entire disclosure of which is hereby incorporated by reference.

FIELD OF THE INVENTION

The present invention is directed to a network kiosk having customer interaction stations that help facilitate selling goods or services with the assistance of a remotely located sales force.

Background of the Invention

Alvin Toffler seems prescient in retrospect. The information age is upon us. One of the primary vehicles of the Information age is the Internet. Not only has the Internet driven the growth of the Information age, it has ushered in an entirely new business model in which conventional "brick and mortar" style businesses are forced to compete with virtual stores. These virtual stores have little, if any, real estate, generally tend to have few employees, and may not have much inventory. With such little overhead, these virtual stores are on the cutting edge of commerce, squeezing profits from a landscape heretofore thought barren by other market participants.

These virtual stores typically have an Internet presence through a web page and a well advertised domain name such as AMAZON.COM, PETS.COM, FLOWERS.COM, PRICELINE.COM, or the like. These web pages are designed to be user friendly and to some extent intuitive so that customers may easily use the web page to select items for purchase and then complete the transaction. For example, AMAZON.COM has its now infamous "one-click" technology embodied in U.S. Patent No. 5,960,411. PRICELINE uses several forms of patented reverse auction methodology to effectuate its sales efforts.

Some of these ventures have been very successful; others have had highly successful start ups only to hemorrhage cash at every opportunity and end up lying on the scrap heap of the Internet with a virtually dusty virtual store with few or no customers. These failures may be attributed to any number of things, but perhaps one of the most relevant factors is the lack of any human interaction throughout the process, coupled with a non-user friendly interface. Thus, there remains a need to facilitate some form of human interaction with these virtual stores.

Still another reason that these e-commerce participants may fail is their inability to let potential consumers know about their existence. AMAZON, PRICELINE, PETS, and some others have spent immense amounts of money in advertising campaigns designed to increase awareness as to the products and services that they sell. Attempts by other start-ups to match these advertising expenditures may sometimes contribute to their demise. Thus, there remains a need for a technique for virtual stores to impose awareness of their existence onto the consuming body.

While humanity may be moving to a truly electronic economy where there are no stores, merely inventory holding locations, a substantial portion of the population remains isolated from the Internet - i.e. the so-called "digital divide," or are technophobes who are still leery of the mechanisms by which privacy may be protected over the Internet, or are just reluctant to use computers. Thus, there remains a need to reach out to this potential consumer base. It is highly likely that a bit of human interaction may facilitate reaching this portion of the population.

The aforementioned problems are compounded when dealing with technologically advanced commercial items such as home entertainment equipment, computers, mobile phones, and the like. For items such as these, many consumers want to be able to be told of the advantages and disadvantages associated with particular brands and models before completing

their purchase. While much of this information may be available on the Internet, it may not be linked to the virtual stores selling the products, or otherwise may not be easily located. As the consumer becomes frustrated trying to locate the information, the likelihood of a sale decreases. Thus, there remains a need for virtual commercial entities to more readily promote their product with easy access to the underlying information. This too might be overcome or at least mitigated with a little human intervention.

Technologically complex devices are also suffering from a lack of qualified sales people, even in the traditional brick and mortar stores. In the past, commission based sales agents worked the floors of retail stores. These individuals were trained to understand the complexities of the devices that they sold and were able to answer most questions posed to them. However, such agents have been phased out, replaced with minimum wage sales clerks who are responsible for all the products in the store. Thus, these clerks become veritable “jack of all trades, master of none” type people, who may be able to answer superficial questions about any given product, but are unlikely to know the particulars of another given product. Manufacturers feel that a more qualified sales force may improve sales for a product, and thus, it may be desirable to make knowledgeable sales agents available to the customer.

At the same time that the Internet has exploded, other non-brick and mortar selling techniques have also proliferated. In particular, telemarketing has gained in popularity. DAVOX, IBM, SIEBEL, KANA, and LUCENT have all been active participants in this arena, developing suites of products that help vendors provide adequate phone support and customer response ability to their consumers.

However, while technology does exist, there remains a need for a vendor to wed the disparate technology into an integrated whole that merges Internet based selling with a healthy

dose of human interaction, and a touch of the brick and mortar to provide a truly effective selling vehicle.

Furthermore, there may be locations where a network kiosk as described in application serial number 09/614,399 is too large for a desired location, such as in a department store. In those instances, a smaller foot print kiosk may be appropriate. Additionally, there may be occasions when the sales agent and the customer do not share a common language. Advances in voice recognition technology and automated translation services would also be of benefit to the network kiosk of application serial number 09/614,399.

SUMMARY OF THE INVENTION

The present invention comprises a network kiosk having a customer interaction station in a high traffic location such as a mall, an airport, a video rental store, a plaza, or the like. This network kiosk may include a number of features that make it eye catching and designed to draw in a potential customer. The customer interaction station includes a high bandwidth communications link that allows access to one or more communications networks and through such networks to a virtual vendor and his sales force.

The customer interaction station may be shaped as a booth on which several displays are mounted. In one embodiment, a high definition screen is positioned at eye level on the back wall of the booth with smaller displays on both interior sidewalls of the booth. An additional display may be mounted to the ceiling of the booth. Speakers are associated with the booth so that an audio signal may be generated. Still further, the booth may include bright, flashy, surface indicia designed to attract the eye of the casual viewer. Further, a sample of the product sold through the customer interaction station may be mounted on the roof of the booth together with laser

lights or the like. Finally, the booth may include a customer input area including a keyboard, a mouse, roller ball, touchscreen, or the like, as well as a microphone and payment accepting devices including a cash acceptor, a check reader, a credit/debit card reader, and/or an Automated Teller Machine (ATM).

5 While not seen by the customer, the customer interaction station includes a high speed, high bandwidth connection to one or more communications networks. Through this connection, the customer interaction station may communicate to the virtual vendor, and the virtual vendor may control the outputs of the customer interaction station.

10 At the virtual vendor, the sales force may be highly trained specialists that are intimately familiar with the products or services being sold. Further, each sales agent may be equipped with sufficient computing power to control the displays and outputs of the customer interaction station. Specifically, a camera may be directed at the agent along with a microphone and the resulting audio and video be sent to the customer interaction station for display on one of the screens. The sales agent may additionally use his computer to bring up web pages, video
15 commercials, or other content and send such content to the customer at the customer interaction station. In one embodiment, the sales agent may send a snap shot of a web page to the customer at the station and both the customer and the agent manipulate the web page as needed. Further, the sales force is networked together so that calls may be internally transferred. In short, the sales agent is provided with many tools and techniques to convey information to the customer so
20 as to help complete a sale.

 The methodology of the present invention includes the customer being attracted to the customer interface station by its flashy graphics and the laser light show and asking a question. Voice recognition software may initially screen the customer's request or the customer may have

input the question through another form of input such as a touchscreen or keyboard. Regardless of the particular input technique, the query is screened for content and directed to the sales agent most knowledgeable about the query. The sales agent then uses his tools to provide information and the like to the customer so as to convince the customer to make a purchase. As the customer interface station includes payment-accepting devices, the sale may immediately be consummated and the product or service delivered subsequently.

A smaller footprint kiosk may be better suited for use in certain locations such as department stores. In such environments, it is possible to take advantage of some of the payment means available in the store. Further, a pivotable monitor or display may be used so as to maximize the presentation possibilities of the kiosk. Still further, the kiosk may incorporate voice-to-text software so that both the customer and the sales representative have a textual indication of the terms being discussed. This may reduce confusion amongst the parties. In some instances, the sales agent and the customer may not share a language. For these situations, text to voice software and translation software may still enable communication between the parties.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a front perspective view of a customer interaction station according to the present invention;

Figure 2 illustrates a top view of the customer interaction station of Figure 1;

Figure 3 illustrates a schematic commerce system according to the present invention;

Figure 4 depicts a flowchart that illustrates certain steps or occurrences that take place during the course of an interactive sales communication between a customer and a remotely located sales agent;

Figure 5 illustrates a front perspective view of a smaller footprint customer interaction station;

Figure 6 illustrates a top plan view of a network kiosk positioned in an environment in which it may coordinate payment through the environments payment means; and

Figure 7 illustrates a flow chart of the translation and conversion options that may be used with the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The present invention provides network kiosks with customer interaction stations that are typically located in high traffic areas. These stations are connected through a high bandwidth communications link to a vendor and the vendor's sales force. The vendor is then able to manipulate the information provided by the station to the customer in such a way as to promote a sale.

The type of vendor is substantially limitless, however, vendors promoting products or services requiring expertise are best served by the present invention. In particular, technologically based products and services such as satellite television service, audio and visual products, cellular phones, banking, and the like are well served by the present invention.

A network kiosk 10 is illustrated in Figures 1 and 2. Network kiosk 10 may include surface indicia 12 such as company logos, banners, promotional phrases or the like. Further, to promote the eye candy feel of the network kiosk 10, lights 14 may be positioned strategically

throughout the network kiosk 10. Further, top lights 16 may also be incorporated into the network kiosk 10. Top lights 16 may be spotlights with indicia displayed thereon (not shown), lasers, or the like, as needed or desired. Still further, a mock up of the product 18 sold through the network kiosk 10 may also be positioned on the top of the network kiosk 10. For example, if the network kiosk 10 were designed to promote DIRECTV and its associated satellites, then the surface indicia 12 may state DIRECTV and the logos shown in the lights 16 may state the same. Further, the product 18 may be a real satellite dish or mock up of a satellite dish. Other arrangements are also possible, however, the overarching concept behind the network kiosk 10 is to attract the eye and draw customers to the network kiosk 10. Thus, any ornamentation should preferably be designed to do such. For example, a scrolling text bar (not shown) could surround the top of the network kiosk 10.

While the dimensions of the network kiosk 10 are not material to the present invention, an exemplary embodiment has a height of approximately seven feet tall and a diameter of approximately ten feet. While the network kiosk 10 illustrated is round, other shapes and sizes are also within the scope of the present invention.

As seen in Figure 2, multiple customer interaction stations (sometimes referred to as customer communication stations) 20 may be included in one network kiosk 10, although network kiosks 10 with a single customer interaction station 20 are also contemplated. Each customer interaction station 20 may include a primary display 22, which in an exemplary embodiment is a computer monitor. Alternatively, a flat, high definition, television screen such as that sold by PHILIPS, SONY, or the like may be used. Supplemental side displays 24A and 24B may also be positioned, one on either side of the primary display 22. A top display (not shown) may be positioned above the primary display 22 or on the ceiling of the customer

interaction station 20. Speakers 28 may further be positioned advantageously about the customer interaction station 20. In an exemplary embodiment, full stereo sound capabilities are available in the customer interaction station 20. Other output devices may also be provided as needed or desired to convey information to customers. For example, tactile boards for the visually impaired or other devices may be incorporated into the customer interaction station 20.

As the purpose of the customer interaction station 20 is customer interaction, each customer interaction station 20 may include customer inputs 30 as well. In particular, a keyboard 32, a mouse 34, and microphone 36 may be provided on a table-like area 38. While a mouse 34 is particularly contemplated, equivalently, a joystick, a roller ball, an electronic writing pad, a touchpad, or the like may be substituted or provided in addition thereto. Such customer inputs 30 may be provided on both the left and right hand sides of the keyboard 32 to accommodate left and right-handed users. Further, the arrangement of customer inputs 30 may preferably be arranged so as to provide an ergonomic environment. While not shown, a chair, stool, or other seat may be provided for a customer. If a seat is provided, the table-like area 38 is lowered to a height corresponding to the seat. If no seat is provided, the table-like area 38 is at a height for a normal standing person. In one embodiment, table-like areas 38 of different customer interaction stations 20 within the same network kiosk 10 may be at different heights to accommodate differently sized users.

As better seen in Figure 2, in addition to customer inputs 30, each customer interaction station 20 may further include customer payment devices 40, which may include a check reader/acceptor 42, a magnetic card reader 44, a cash acceptor 46, or the like as needed or desired. Magnetic card reader 44 may be a swipe type device or an insert type device such as is commonly found on Automated Teller Machines (ATMs). Alternatively, a wireless payment

device may be used. Such a wireless payment device is commonly seen on heavily traveled toll roads and comprises an interrogator in the customer interaction station 20 and a transponder with account information thereon in possession of the customer. As such devices are conventional, further discussion thereof will be omitted.

5 Network kiosk 10 may include a full ATM in place of one customer interaction station 20 if so desired. Then, each customer interaction station 20 may communicate to such ATM as needed to help complete financial transactions. Alternatively, the magnetic card reader 44 may be linked to an ATM network such as HONOR, CIRRUS, PLUS, or the like and function as an ATM for a customer. To facilitate this arrangement, a cash box 50 may be positioned within the
10 kiosk 10 with cash dispenser 52 available at any given customer interaction station 20. While not required, it is expected that the magnetic card reader 44 read credit cards, debit cards, and ATM cards.

 A high bandwidth communications link 100 is also included in the network kiosk 10. Since each high definition video signal requires approximately 180 MHz, it should be
15 appreciated that each customer interaction station 20 may require approximately 1 GHz of bandwidth to provide adequate reception of incoming signals and transmission of outgoing signals. Where the network kiosk 10 includes a plurality of customer interaction stations 20, this bandwidth requirement is increased. Note that each customer interaction station 20 may include its own communications link 100, or a single communication link 100 may serve the entire
20 network kiosk 10 and all its associated customer interaction stations 20. The high bandwidth communications link 100, while shown as a wirebased link, may alternatively be a wireless communications link and instead of a wire and plug (as shown), an antenna may equivalently be provided. Further, wire, in this context, should be interpreted as including fiber optic solutions.

While not shown, it is possible that each customer interaction station 20 may include a controller, such as a microprocessor or other local device that acts as a local intelligence for the customer interaction station 20. Such controller may include communications software and/or hardware to control the communications link 100. Alternatively, a single controller may be provided for the entire network kiosk 10. As another alternative, each customer interaction station 20 may be a “dumb” terminal, with all functions controlled from a remote location. This is not preferred because there must at least be reception and routing capabilities from the communications link 100 to the displays 22 and monitors 24.

Network kiosk 10 may be dedicated to a single product or multiple products. In the event multiple products are promoted with the network kiosk 10, these products may be a single line from a single manufacturer, disparate products from disparate manufacturers, or some hybrid amalgamation of products. It is also possible, although not preferred, to have competing products from competing manufacturers sold through the same network kiosk 10.

Having described the network kiosks 10 with the customer interaction stations 20, it is appropriate to discuss the system in which the customer interaction stations 20 operates, namely sales system 200, illustrated in Figure 3. A plurality of network kiosks 10 may be placed in high traffic physical locations 202 such as a mall, an airport, a video store, a plaza, a convention center, or the like. Customers may approach the network kiosks 10, and particularly a customer interaction station 20, as previously described. Each customer interaction station 20 is connected to a call center 220 by a high bandwidth communications network 215.

Communications network 215 may include one or more communications subnetworks. Particularly contemplated as being appropriate for the present invention are satellite communications systems 204, the Internet 206, the Public Switched Telephone Network (PSTN)

208, the Public Land Mobile Network (PLMN) 210, and the like. It should be appreciated that a particular customer interaction station 20 may be directly connected to one subnetwork, such as the PSTN 208, and from there connected to other subnetworks such as the Internet 206 before reaching the other end of the communications link, namely the call center 220. Further, any or
5 all of the subnetworks may include a satellite-based link that may or may not comprise its own satellite communications system 204. Note further that in a packet based system, some packets of information may use one communications path while other packets use completely different paths, but still arrive at the destination without problem. A dedicated high bandwidth connection 212 may also be used, or the customer interaction stations 20 may only go through one
10 subnetwork to communicate to the call center 220. Thus, for example, each customer interaction station 20 may have its own IP address and communicate with the call center 220 through the Internet 206. Other equivalent communication schemes are contemplated, but as alluded to elsewhere, a large amount of data may be passing between the call center 220 and the customer interaction station 20. Thus, the communications network 215 needs to be able to accommodate
15 these high data transfer rates. Further, the Internet 206 could include wired connections, such as telephone lines, digital subscriber lines, TV cables, fiber-optic links, and the like, and/or wireless connections, such as microwave, cellular, radio, satellite links, and the like.

Call center 220 may include a switch 222, a main computer or host 224, and a plurality of sales agent workstations 230. Switch 222 may be a Voice Recognition Unit sold by LUCENT as
20 the G3. Other switches may equivalently be substituted. Switch 222 may have its own intelligence or may be slaved to the main computer 224 as needed or desired. Note that switch 222 may be software based or may be hardware.

Main computer 224 may be a personal computer with a microprocessor therein, or may be a dedicated network server, or the like as needed or desired, and may include memory with software implementing the methodology of the present invention stored thereon. Memory may be a hard drive, flash memory, EEPROM, CD-ROM, optical CD, floppy disk, DVD-ROM, magnetic tape, or other form of computer memory as is well understood in the field of computers. The software may be written in any appropriate code as needed or desired. In an exemplary embodiment, the main computer 224 is an ASM 400 sold by IBM.

It should be appreciated that the structure of the main computer 224 is provided as an example, and is not intended to be limiting. Other variations on the structure of the main computer 224 are specifically contemplated. Thus, while the main computer 224 has been described as a centralized computer at one physical location, those skilled in the art will appreciate that the main computer 224 could use other architectures to accomplish the same functionality. In another embodiment, the main computer 224 could be a distributed system with multiple computer systems, each of them comparable to the centralized main computer 224 described above, and located at one physical location, linked together through a local area network (LAN). Each of the computer systems performs part of the tasks accomplished by a centralized host computer system.

In yet another embodiment, the main computer 224 could be a distributed system with multiple computer systems scattered across a number of physical locations, but linked together through a wide area network (WAN). Each of the computer systems may also perform only one part of the tasks of a centralized host computer system. The software may be resident on the single central computer or distributed throughout the network embodying the main computer 224 as needed or desired.

In a third embodiment, the main computer 224 could in fact be duplicative servers, each with its own switch 222, and each capable of supporting the present invention. Such arrangements are common for game servers like EVERQUEST, ASHERON'S CALL, and the like. In these configurations, the customer interaction station 20 must access the appropriate
5 server to access their account. However such architectures are well known, and a further discussion will be omitted.

It is specifically contemplated that the switch 222 and main computer 224 may be connected to the communications network 215 at all times and therefore should be adapted to have a fail safe and hot-swappable structure. This will allow continued operation even in the
10 event of isolated failures within the system. Additionally, the software may be backed-up regularly, as is well known in the industry, to recover in the event of a catastrophic failure.

Further, the main computer 224 may be connected to the Internet 206 not from a communications network standpoint, but as a client seeking information therefrom. In effect, the main computer 224 may act as an Internet Service Provider (ISP) for each sales agent
15 workstation 230.

A "computer" is defined herein as any data processing device including microprocessors, conventional personal computers, personal digital assistants, mobile terminals or phones, and the like. The term is meant to be construed broadly. While some of the commercial embodiments of these devices may presently lack the processing power to support the present invention, there is
20 nothing that inherently prevents them from serving this function.

Sales agents 232 may be directly connected to the main computer 224, or more probably, may have workstations 230. Each sales agent workstation 230 is designed to enable sales agents 232 to interface with the customer at the customer interaction station 20 and may include a

number of inputs and outputs such as a video camera 234, a microphone 236, a monitor 238, a keyboard 240, and speakers (not shown). The relationship between the workstation 230 and the main computer 224 may be peer-to-peer or client-server, and may be connected through a LAN, WAN, or other technique as needed or desired. The communications link between the workstations 230 and the main computer 224 may be a high bandwidth link so as to support the efficient pass through of video signals and the like.

In one embodiment, each workstation 230 has access to the Internet 206 to solicit content therefrom. This may be in addition to using the Internet 206 as a communications network 215 to connect the customer interaction station 20 to the call center 220. This additional connection may be done through the main computer 224 or directly as needed or desired.

Further, incoming communication to the call center 220 may be routed between different sales agents 232 as needed or desired. Thus, if a particular sales agent 232 is not trained to provide an answer to an asked question, he may transfer the call to another agent 232 who may provide the desired answer. As part of this internal transfer, a call record may also be transferred which includes any desired information about the call and/or caller to assist the new sales agent 232. This may be particularly helpful for customer service questions where troubleshooting is occurring. The new sales agent 232 may tell with a glance at the call record what has been attempted and suggest new, non-redundant solutions. Further, this call record may be linked to the customer's purchasing record so that the sales agent may make recommendations based on previous purchases. For example, if the customer were inquiring about DIRECTV, the sales agent 232 could see that the customer had previously purchased a HDTV. The sales agent 232 could state with confidence that the DIRECTV service would be fully compatible with the customer's television, or would need this particular sort of adaptor which is sold by this other

company, and so on. A database may be maintained for each customer to promote the use of this sort of information by the call records.

Additionally, the call center 220 may include a full accounting suite of software that facilitates the financial transactions surrounding sales through the customer interaction stations

20.

DAVOX of Westfield, Massachusetts has a suite of products, variously described in U.S. Patents 5,790,650; 5,784,452; 5,761,285; 5,640,577; 5,592,543; 5,164,981; 5,285,400; 5,276,732; 5,278,898; 5,832,068; and 6,047,054 which are all hereby expressly incorporated by reference that help facilitate the functioning of the call center 220. Similar products are also be available from KANA, IBM and LUCENT. These products may be implemented by the switch 222 or the main computer 224 as needed or desired.

An exemplary embodiment includes using IBM's CALLPATH software together with IBM's DIRECTTALK software, SEIBEL CALL CENTER software, IBM's AIX servers (250P, M80), and a LUCENT G3 switch. Other arrangements of hardware and software are also possible, however, it is believed that this arrangement provides all the functionality needed. A particularly contemplated arrangement would have a dedicated T-1 or Ds3 line extending from the network kiosk 10 to the call center 220. At the call center 220, the call reaches a G3 Lucent switch, which uses Skills Based Routing within the Lucent CallPath software. More specifically, Intelligent Routing allows further selectivity in getting the call to the most appropriate sales agent 232. Sales agent 232 is equipped with Seibel's Contact Application software on workstation 230.

With that description of the hardware utilized in the present invention, it is now possible to explain more fully the methodology of the present invention. See Figure 4. In particular, a

customer initially approaches a network kiosk 10 in a high traffic area (block 300). The flashing lights, glittering images, and splashy appearance of the network kiosk 10 cause the customer to enter a customer interaction station 20 (block 302).

Once in the customer interaction station 20, the customer may then input a query (block 304). This may be done by speaking into the microphone 36, using the keyboard 32, using a touchpad, or the like as needed or desired. In one embodiment, the controller in the customer interaction station 20 performs some initial signal processing and transmits the query over the communications network 215.

Regardless of the nature of the input and regardless of what processing is performed at the customer interaction station 20, the query is linked to the switch 222 (block 306). Switch 222 is responsible for interpreting the incoming query and routing the query to the appropriate sales agent 232 (block 308). It is possible that the desired sales agent 232 is presently helping another customer, and thus unavailable to field the inquiry immediately. In such a circumstance, or perhaps as a matter of course, a hold message may be sent to the customer (block 310). However, in contrast to a traditional audio hold message, the present invention allows the customer to receive a full multimedia hold message. The various displays and monitors 22, 24A, 24B, and optional ceiling monitor may be selectively activated to present a myriad of images to the customer. Further, speakers 28 may supplement the visual imagery in a coordinated fashion so as to present a coherent message to the customer. Such hold message may be as detailed or superficial as desired by the vendor.

Eventually, the sales agent 232 becomes available and comes online (block 312). An image of the sales agent 232 may appear on the display 22. This image is captured by camera

234 and transmitted through the communications network 215 to the customer interaction station 20.

The sales agent 232 may “push” additional content to the customer (block 314). In particular, the sales agent 232 may send additional audio and/or visual information to the customer. The customer then interacts with the sales agent 232 and/or the content (block 316). Note that the particular order of these two steps need not occur as indicated, but instead could be reversed. Thus, the sales agent 232 may inquire what sort of questions the customer has and provide answers himself or push the appropriate content down the communications link to the customer to provide the desired answers.

The sorts of content provided to the customer may be almost infinitely varied. The content may be prepared by the vendor in much the same fashion that the hold message was, may be a web page that is accessed from the Internet 206 and pushed down to the customer, may be audio clips, streaming video, or other content containing signal as needed or desired. Further, depending on the nature of the content provided, the customer may interact with the content directly with the sales agent 232 able to perceive the interaction. Thus, for example, if the sales agent 232 pushes a snapshot of a web page down to the customer for viewing on display 24A, the customer may use his mouse 34 to move a cursor around the web page and the movements displayed simultaneously on the monitor 238 so that the sales agent 232 may suggest links or the like that the customer may want to view. The sales agent 232 may have multiple monitors one for viewing the image that the customer is viewing, and one for viewing the customer. At the same time that the customer is viewing content, audio may be playing, or the sales agent 232 may be speaking in a coordinated fashion to promote the product or service for sale.

Still further, the sales agent 232 may transfer the call to another sales agent 232 to provide additional information to the customer, either about a different product with which that original sales agent 232 was unfamiliar or to answer a question for which the original sales agent 232 did not have an answer or for any other reason. As described above, a call record may be maintained and transferred with the call so that the new sales agent 232 is fully apprised of the nature of the inquiry and does not have to solicit information already provided by the customer. While discussed primarily in terms of transferring calls, it should be appreciated that the term transfer as used herein also includes situations where another sales agent 232 is merely brought into the conversation, such as in a conference call. Again, the new sales agent 232 may send a video signal to the customer interaction station 20 and help promote the sale as needed or desired.

As a result of the coordinated sales pitch, the customer may decide to purchase the product or service. The sales agent 232 may instruct the customer on paying for the product or service at the customer interaction station 20. In particular, the customer may consummate the transaction (block 318) by inserting cash in to the cash acceptor 46, swiping a credit card or debit card through the magnetic card reader 44 or providing a check for the check reader 42. Alternatively, while not shown, a wireless transponder associated with a payment means may also be used. Additionally, financing sales agents may be selectively brought into the call to approve financing for big-ticket items as needed or desired. This may be done by a call transfer or the like as needed or desired.

The product or service is then delivered (block 320). Some products or services may be delivered immediately, for example, many banking services, however, some may be delivered subsequently, or become available for customer pickup as needed or desired.

It should be noted that the sales agents 232 are specialized and able to answer most any question that a customer may have. Thus, the sales agent associated with banking services may be a loan officer or the like. Insurance agents may have the authority to issue policies and the like. For complex electronic products, the sales agents 232 may be company representatives who have immediate access to customer service personnel or the like as needed or desired. In this manner, customers get the best service possible as they go through the sales pitch. This reintroduces the expert sales agent to the sales process promoting better selling.

Of course, while this may be the desired methodology, there may be occasions when customers merely use the customer interaction station 20 as a conventional ATM machine. There may also be occasions when the customer refuses to complete a transaction and walks away. These situations are facts of life for the sales force, and while regrettable, inevitable. However, market studies show that merely placing an ATM in a store increases traffic in the store as well as increasing in-store purchases. Thus, it is expected that many locations may desire the network kiosk 10 for that reason alone and may be willing to pay a fee for the placement of a network kiosk 10 in a particular location. Thus, while not every inquiry will result in a sale, other moneymaking routes are potentially available to the operators of the network kiosks 10.

An alternate network kiosk 400 is illustrated in Figure 5. Network kiosk 400 is designed to be a smaller footprint kiosk and suitable for positioning in tighter quarters than network kiosk 10. As such, network kiosk 400 may have only one customer interaction station 402. Further, displays 404, 406, and 408 may be T86 18.1" TFT LCD Monitors with lift, tilt, swivel, and pivotable bases to maximize viewing options and comfort levels of individuals using the

customer interaction station 402. Alternately, the display 404 may include the web camera. IBM's NetVista 40 is one such product.

To further conserve space within the network kiosk 400, the network kiosk 400 may have an additional communication link 410 that interfaces with the payment means available in the store or location at which the network kiosk 400 has been positioned. This is further illustrated in Figure 6, wherein network kiosk 400 is positioned in a store 500, and communication link 410 communicatively connects network kiosk 400 to counter 502 and more particularly to payment devices 504, 506, such as a cash register or magnetic card reader. Thus, after completing a sales pitch, the customer may walk over to the counter 502 within the store 500 and pay for the purchase through any conventional means. Store 500 may include one or more aisles of product displays 508 as is conventional. Network kiosk 400 may be positioned such that it is visible from doors 510, yet require individuals to walk past displays 508, thereby increasing the likelihood of an impulse purchase. Alternatively, network kiosk 400 may be positioned near the doors 510, or in other locations as needed or desired.

Note that the use of the pivotable displays 404, 406, and 408 is not limited to the small footprint network kiosk 400, but rather may also be used with any customer interaction station 20 in network kiosk 10. Likewise, normal network kiosks 10 may be networked with the payment means of the store 500 if needed or desired.

As a further added feature, both the small footprint network kiosk 400 and the original network kiosk 10 may incorporate voice-to-text software so that customers may merely speak their commands. Commercially available software for such functionality may be FREESPEECH 2000 or IBM VIAVOICE PROFESSIONAL MILLENNIUM. Thus, the customer and the sales agent 232 may see the communication "in writing" on one or more displays, hopefully

preventing misunderstanding about any of the terms of the communication. Furthermore, SYSTRAN Enterprises has introduced a number of translation software programs that allow text to be translated from one language to another. Amongst the titles available are, for example, SYSTRAN PROfessional Premium, and SYSTRAN Enterprise. For example, English to Italian
5 and vice versa. For those instances when there is a language barrier between the sales agent and the customer, such functionality may further support the consummation of the sale. As an additional feature, TALK BACK 2000 allows text to voice translation. Thus, in one embodiment, a customer could verbalize a communication, PHILIPS FREESPEECH 2000 could translate it to text, the SYSTRAN software could translate it to German, and then TALK BACK
10 2000 could change the now German text to voice for comprehension by the sales agent. This process could be reversed for communications from the sales agent to the customer.

A brief flow chart illustrates this process generically in Figure 7. Either party may provide a voice input to a microphone (block 600). The voice input is converted to text visible by both parties (block 602). As noted this may be done by software. If needed, the new text
15 message is translated to another language (block 604). Also, if desired or needed, the new language text may be converted back to a voice signal (block 606), and the new voice signal is output through speakers (block 608). Note that the voice-to-text and text-to-voice steps may be performed without the intermediate translation step; however, if such is desired, it would make more sense to transmit an audio signal over the high bandwidth connection 100.

20 Other software programs may be substituted as needed or desired. For example, JYS Reader allows translation between languages of text as well. Note that the translation services do not have to be to translate voice communications, but rather may also be used to translate foreign language web pages if needed or desired to show a customer a particular feature or provide the

customer with certain content desired. Other voice recognition software packages that may be used include, but are not limited to L+H VOICE EXPRESS PRO, and DRAGON NATURALLY SPEAKING.

The present invention may, of course, be carried out in other specific ways than those herein set forth without departing from the scope and the essential characteristics of the invention. The present embodiments are therefore to be construed in all aspects as illustrative and not restrictive and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

CLAIMS

What is claimed is:

1. An interactive communication system that permits customers to communicate and interact
5 with one or more sales agents located at a remote location, comprising:
 - a customer communication station adapted to be located remotely from the sales agents;
 - the customer communication station including a series of pivotable video monitors
adapted to be communicatively linked to the remote location such that video and audio generated
by the sales agent can be communicated from the remote location to one or more selected video
10 monitors associated with the communication station for viewing by the customer;
 - a customer interaction interface associated with the communication station for permitting
the customer to communicate and interact with the one or more remotely located sales agents;
and
 - the customer interactive interface including a keyboard and an audio input for permitting
15 the customer to communicate with a sales agent located at the remote location.
2. The interactive communication system of claim 1 further comprising voice recognition
software for receiving a customer voice input and presenting said voice input as a textual image.
- 20 3. The interactive communication system of claim 2 wherein said textual image is displayed to
the customer.
4. The interactive communication system of claim 2 wherein said textual image is displayed to
the sales agent.

5. The interactive communication system of claim 2 wherein said textual image is displayed to both the sales agent and the customer.

6. The interactive communication system of claim 2 further comprising translation software for translating said textual image version of the voice input to another language.

7. The interactive communication system of claim 6 further comprising text to voice software, said text to voice software receiving a translated version of said voice input and emitting an audible version of the textual image in the translated language.

8. The interactive communication system of claim 1 further comprising a communication link for communicating with payment means proximate said communication system.

9. A method of facilitating interactive communications between a customer and one or more sales agents located remotely from the customer, comprising:

locating a customer communication station remotely from a sale site where one or more sales agents are located;

initiating an interactive dialog between the customer at the customer communication station and at least one remotely located sales agent located at the sales site;

the interactive dialog comprising generating video and audio signals at the sales site and transmitting the video and audio signals to the customer communication station where video

images appear on one or more video monitors incorporated into the customer communication station;

the interactive dialog further comprising directing communications from the customer at the customer communication station to one or more sales agents located at the sales site through an audio input and a keyboard incorporated into the customer communication station; and

the interactive dialog further comprising generating a textual image of a voice input from one of the parties to the interactive dialog.

10. The method of claim 9 wherein the interactive dialog further comprising generating a textual image of a voice input from one of the parties to the interactive dialog comprises generating a textual image of a voice input from the customer.

11. The method of claim 9 wherein the interactive dialog further comprising generating a textual image of a voice input from one of the parties to the interactive dialog comprises generating a textual image of a voice input from the sales agent.

12. The method of claim 9 wherein the interactive dialog further comprising generating a textual image of a voice input from one of the parties to the interactive dialog comprises generating a textual image of voice inputs from both the sales agent and the customer.

13. The method of claim 9 further comprising repositioning one or more of the series of displays so as to view the display.

14. A network kiosk comprising at least one customer interaction station, said customer interaction station comprising:

at least one customer input device;

at least one pivotable display;

at least one output device; and

a communications link for communicating with a remote location from which a sales agent may interact with a customer through the input, the pivotable display, and output device.

15. A communications system comprising:

a network kiosk having a customer interaction station and a communications link; and

a call center staffed by a plurality of sales agents, said call center being communicatively connected through said communications link to said network kiosk;

said call center controlling content delivered to a customer at said customer interaction station and the customer may interact with at least one of said plurality of sales agents through said communications link; and

said interaction comprising voice to text and text to voice conversion for mutual comprehension by the customer and the at least one of said plurality of sales agents.

16. The communications system of claim 15 further comprising language translation software operating on said interaction.

17. A computer readable medium comprising software adapted to:

receive customer input from a customer interaction station;

deliver to at least one sales agent, located remotely from the customer interaction station,
information from said customer interaction station;

deliver to said customer interaction station content determined by said at least one sales
agent;

5 translate between languages used by the customer and the at least one sales agent;
control information provided to the customer at said customer interaction station; and
said at least one sales agent may promote a sale through the information transferred.

18. A method of facilitating delivery of information to a customer, comprising:

10 providing a network kiosk having a customer interaction station in a high traffic area;
establishing a communications link between said customer interaction station and a call
center staffed with trained sales agents;
accepting queries from a customer, said queries initiated at said customer interaction
station;
15 linking the customer to one of said trained sales agents;
controlling from a computer associated with said one of said trained sales agents
information delivered to the customer;
converting voice input from the customer to text; and
providing live interaction between said one of said trained sales agents and the customer.

20

19. The method of claim 18 further comprising converting text to voice output for said one of
said trained sales agents.

20. The method of claim 18 further comprising translating languages between the customer and said one of said trained sales agents.

ABSTRACT OF THE DISCLOSURE

A customer interaction station includes a number of displays each capable of outputting audio and visual stimuli to a potential customer. The customer interaction station includes a high bandwidth connection to a remote location where sales agents are located. Further, the customer interaction station includes a customer interface complete with multiple inputs by which the customer may convey information to one or more of the sales agents. The customer interaction station includes payment accepting devices as well. In use, the customer interaction station is an eye-catching station that draws potential customers to the station where they are put into contact with a sales agent who can answer their questions about particular products. The sales agent is able to manipulate the displays and other output devices at the station in such a manner as to provide a seamless multimedia sales pitch to the customer. Upon convincing the customer of their need to complete a purchase, the customer is directed to the payment accepting devices and the sale is consummated.

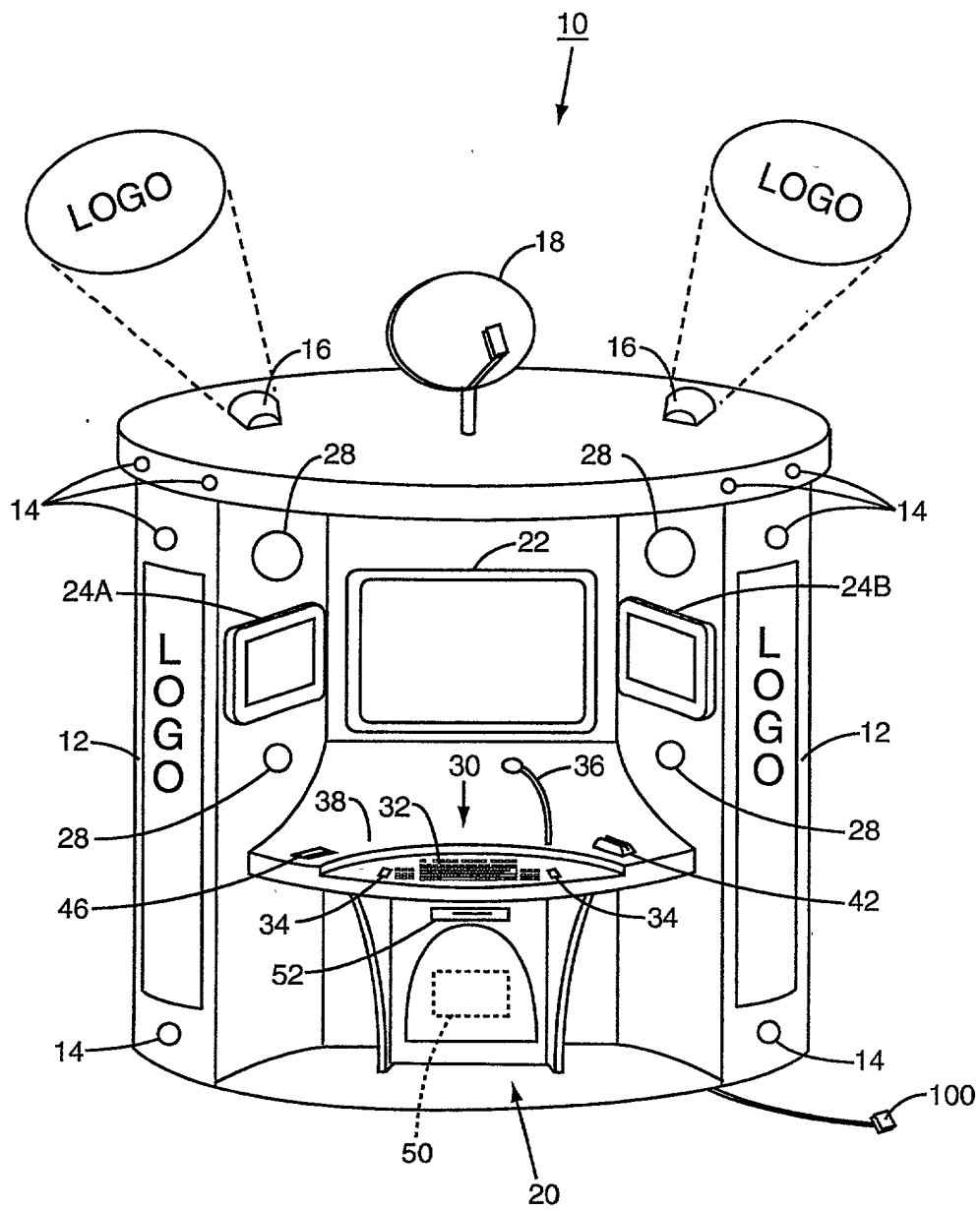


FIG. 1

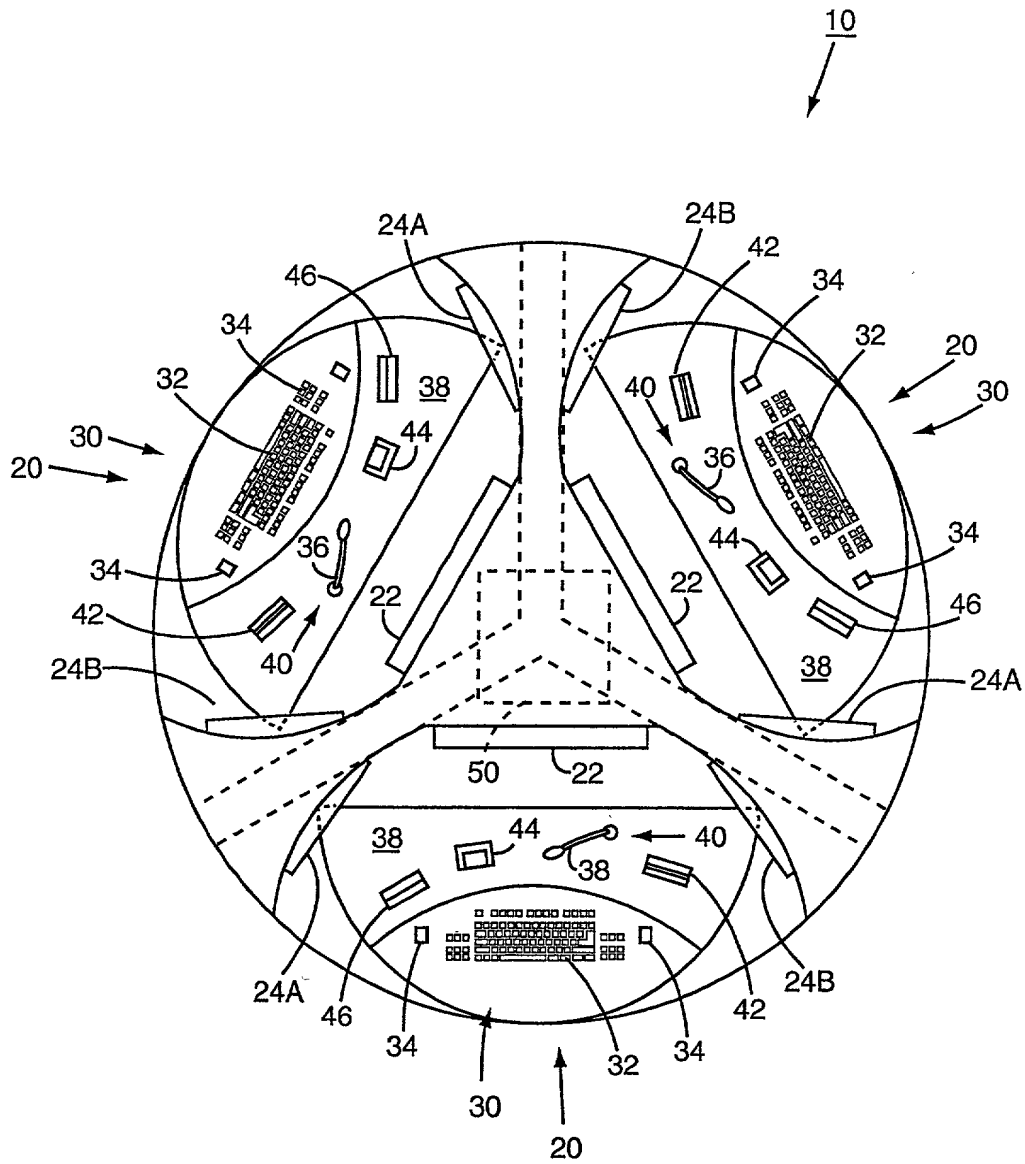


FIG. 2

200

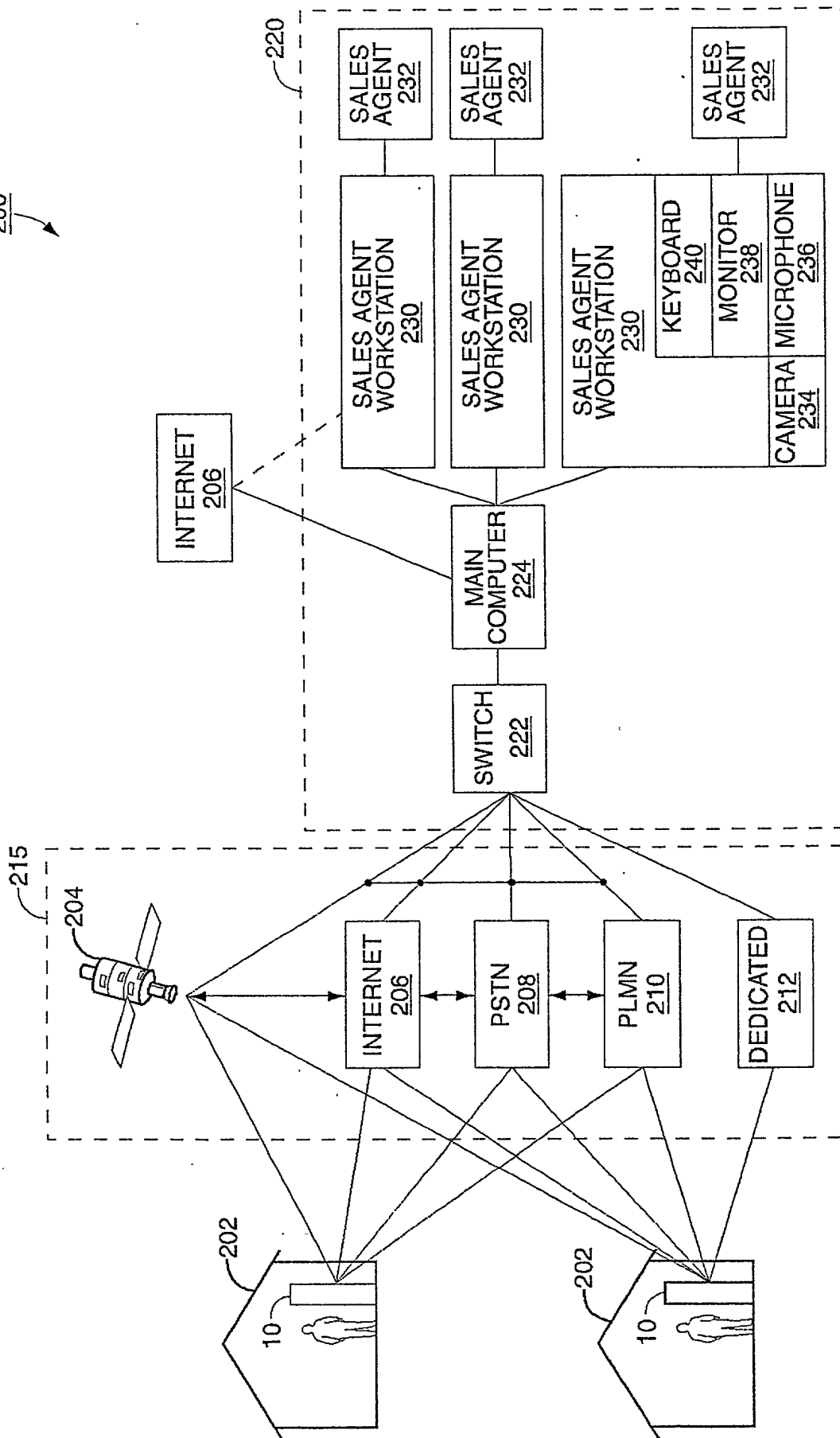


FIG. 3

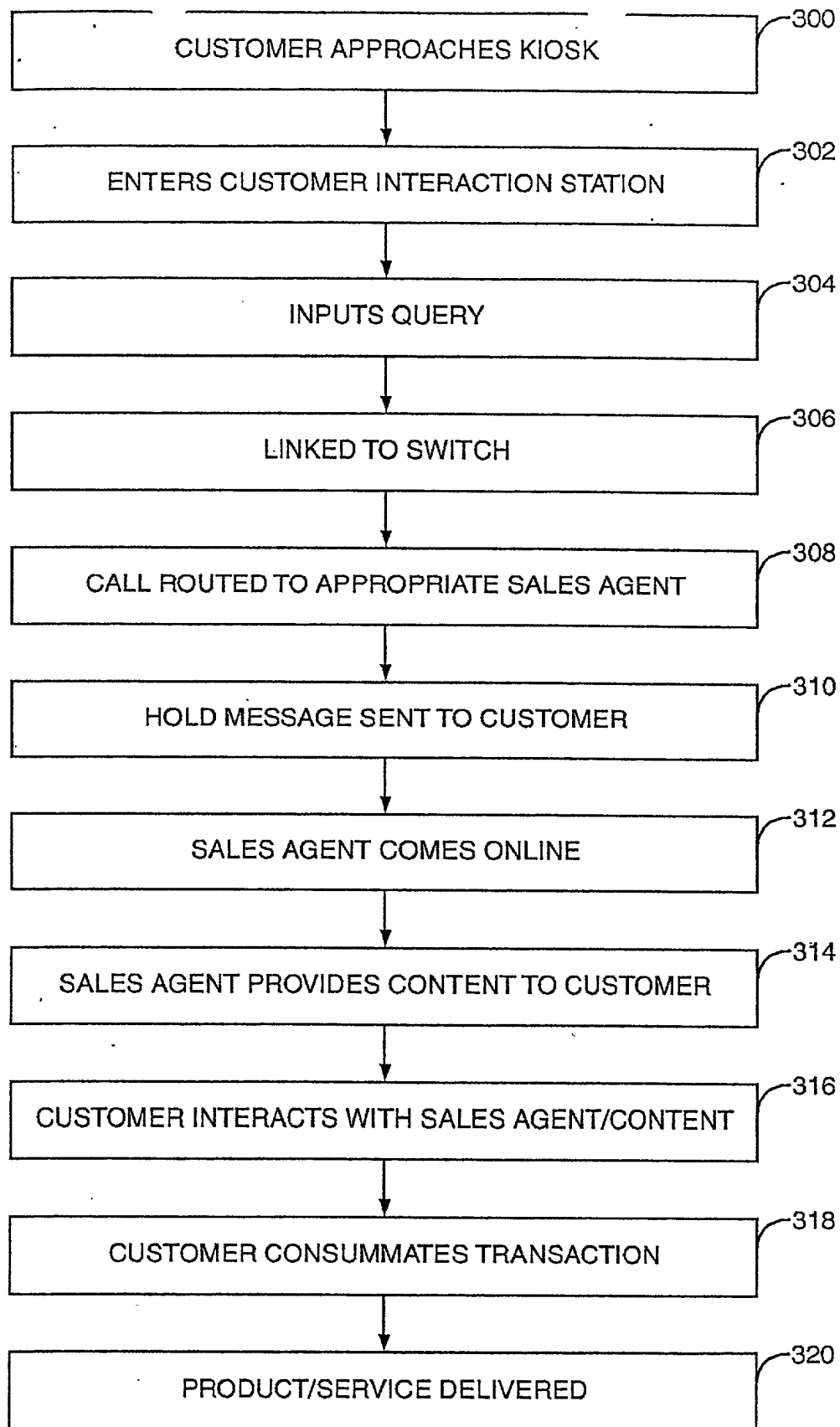


FIG. 4

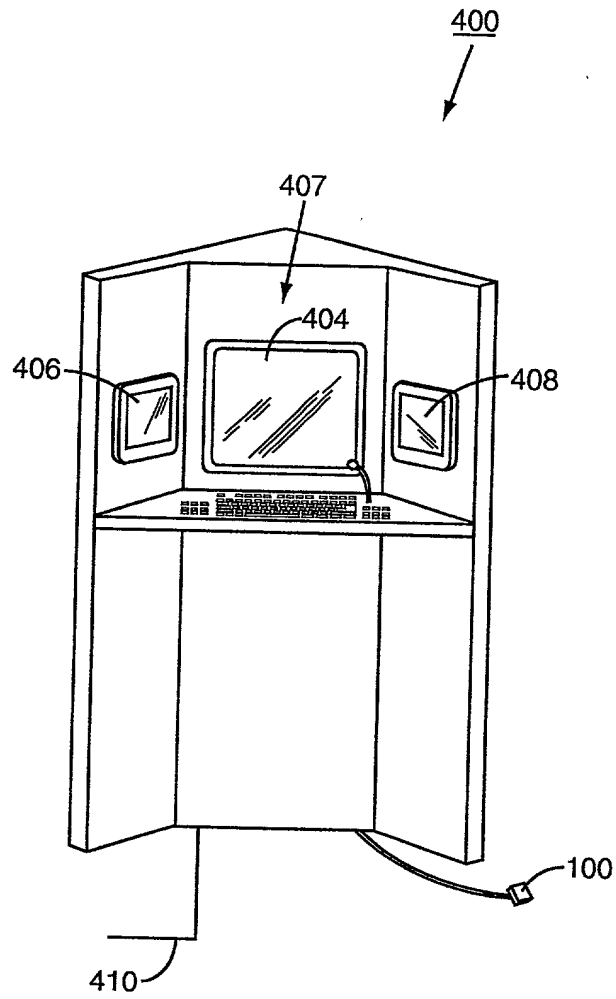


FIG. 5

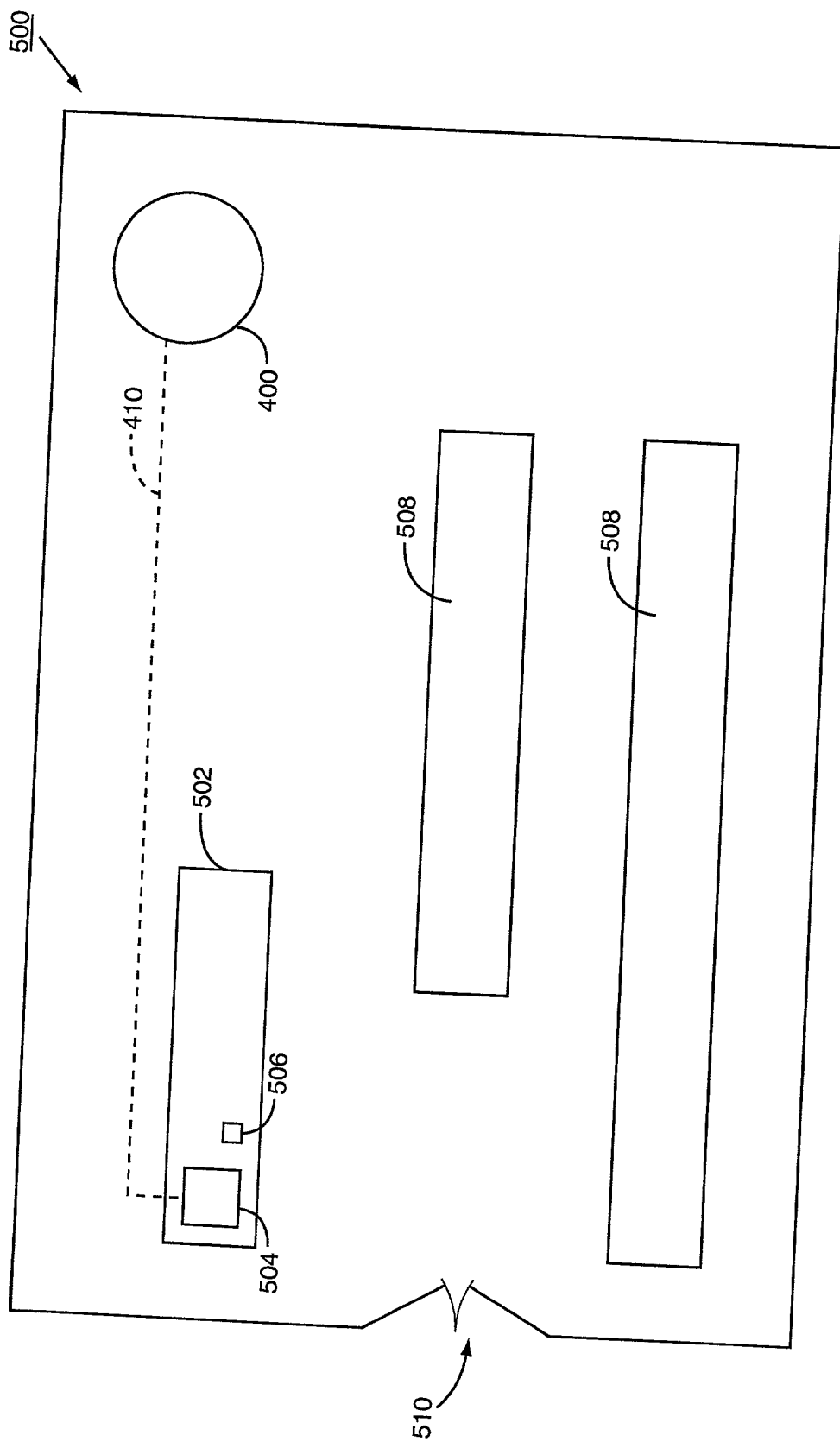


FIG. 6

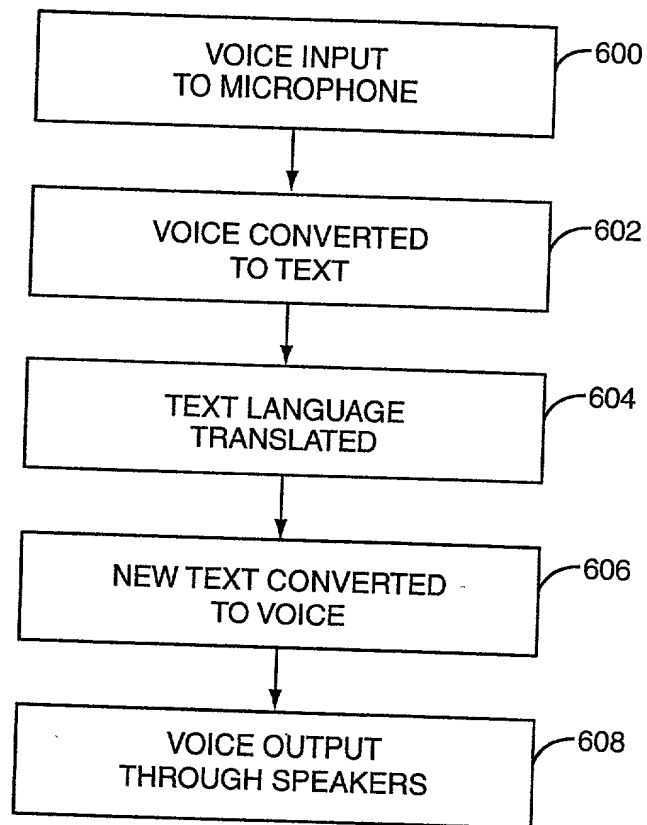


FIG. 7

RULE 63 (37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **SMALL FOOTPRINT NETWORK KIOSK**, the specification of which (check applicable box(es):

☒ is attached hereto;

☐ was filed on _____ as U.S. Application Serial No. _____

☐ was filed as PCT international application No. PCT/_____/_____ on _____ and (if applicable to U.S. or PCT application) was amended on _____. I hereby state that I have reviewed

and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56(a). I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed before the filing date of this application:

Prior Foreign Application(s):

Application Number

Country

Day/Month/Year Filed

I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56(a) which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S./PCT Application(s):

Application Serial No.

Day/Month/Year Filed

Status: patented, pending, abandoned

09/614,399

July 12, 2000

Pending

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

And I hereby appoint the Attorneys and Patent Agents of **Coats & Bennett, P.L.L.C.**, as identified by **Customer Number 24112** in the records of the United States Patent and Trademark Office and as updated from time to time, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith (all communications should be directed to **Larry L. Coats**).



1) Inventor's Signature _____ Date 10/3/00

Inventor's Name(typed) David Hagen United States

First

Middle Initial

Family Name

Citizenship

Residence (City) Southern Pines (State/Foreign Country) North Carolina

Address 360 E. Illinois Zip Code 28387

RULE 63 (37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: **SMALL FOOTPRINT NETWORK KIOSK**, the specification of which (check applicable box(es):

☒ [X] is attached hereto;

☐ [] was filed on _____ as U.S. Application Serial No. _____

☐ [] was filed as PCT international application No. PCT/_____/_____ on _____ and (if applicable to U.S. or PCT application) was amended on _____. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56(a). I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed before the filing date of this application:

Prior Foreign Application(s):

Application Number

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Day/Month/Year Filed

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Prior U.S./PCT Application(s):

Application Serial No.

Day/Month/Year Filed

Status: patented, pending, abandoned

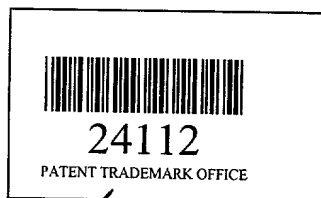
09/614,399

July 12, 2000

Pending

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And I hereby appoint the Attorneys and Patent Agents of **Coats & Bennett, P.L.L.C.**, as identified by **Customer Number 24112** in the records of the United States Patent and Trademark Office and as updated from time to time, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith (all communications should be directed to **Larry L. Coats**).



1) Inventor's Signature

Date

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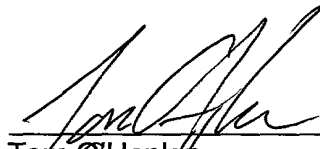
DECLARATION CLAIMING SMALL ENTITY STATUS


I declare that I am an independent inventor and have (1) not assigned, granted, conveyed nor licensed this invention, and (2) am under no obligation under contract, law nor otherwise, to assign, grant, convey or license any rights in this invention including (i) the right to make, use or sell the invention, and (ii) the right to exclude others from making, using or selling the invention to any person who could not likewise be classified as an independent inventor if that person had made the invention, or to any concern which would not qualify as a small business concern or a non-profit organization under §1.9 of the Patent Office Rules of Practice.

I hereby declare additionally that all statements made herein of my own knowledge is true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 10/3/00

Date: 10/3/00


Tom O'Hanlon


David Hagen